

PPL13 PROJECT NOMINEE FACT SHEET

Project Name: Lake Lery Shoreline Protection

Coast 2050 Strategy: Coast wide strategy: Maintenance of Bay and Lake Shoreline Integrity.

Project Location: This project is located in Region 2 in the Breton Sound Basin St. Bernard Parish. It is in the Lake Lery mapping unit and is located northeast of Lake Lery and west of Hwy. 300.

Problem: The strip of marsh between Lake Lery and the Eighty Arpent Canal is eroding, mainly from the Lake Lery side. This mapping unit had 12,620 acres of brackish marsh in 1990. By 2050 it is anticipated that the area will lose approximately 3,110 acres. Most of this loss occurred between 1956 and 1974. Even though the Caernarvon structure went on line in 1991 and should reduce the loss in the mapping unit, this area is somewhat out of the influence of the diversion and has many open ponds surrounded by deteriorating marsh. Causes of loss in the unit were determined to be altered hydrology, storm-related, and herbivory. Even with Caernarvon the unit is expected to lose over 8% of its acreage by 2050.

Project Goals: Prevent or reduce Lake Lery shoreline retreat, re-establish a sustainable lake rim, and prevent the conversion of brackish marshes to saline marshes or to open water.

Proposed Solution: The project would entail the construction of a continuous near shore rock breakwater along the north rim of Lake Lery, extending approximately 34,095 ft. (6.46 miles) from Bayou Mandeville to Bayou Lery. It would be designed to attenuate shoreline retreat along this stretch of Lake Lery as well as promoting shallowing, settling out, and natural vegetative colonization of over wash material landward of the proposed structure. The breakwaters would be placed either on-shore or at the 2' contour within the lake, depending on the geotechnical review during Phase 1.

Preliminary Project Benefits: This project will create approximately 229 acres of wetlands (assuming breakwater placement at the 2 ft contour). It will reduce the loss rate by approximately 75% over the life of the project.

Preliminary Construction Costs: \$6,132,484.00

Nominated by: St. Bernard Parish